

A NEW SOUTH AUSTRALIAN DORMOUSE OPOSSUM.

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The little Dormouse Opossums of the Genus *Dromicia* have a very wide distribution in Australasia; but this distribution, though wide in a geographical sense, is curiously confined to what may be termed the margins of the Australasian marsupial area. One species occurs in New Guinea, two in Tasmania, and one is found upon the mainland of Australia.

With regard to the mainland form, *D. concinna*, there is in the literature some confusion concerning the actual distribution. In discussing the genus, Oldfield Thomas gave the continental range as "Western Australia" (Catalogue of the Marsupialia and Monotremata in the Collection of the British Museum, 1888, p. 141), but by this expression he apparently intended to indicate the western portion of the continent rather than the actual State, for in dealing with the species (p. 147) he defines the range as "South and Western Australia," and records three specimens in the collection as coming from this State.

In South Australia, *D. concinna* has a wide range. It is by no means rare in Kangaroo Island; it is present in most districts in which native bush remains in the southern portion of the State, and it even extends into the mulga and saltbush of the north, having been taken by Mr. A. G. Bolam among the saltbush at Ooldea. So far as I am aware, Mr. Bolam's specimen is the first ever obtained upon the saltbush plains, and it is an extremely interesting record. This Nullarbor Plains example is in every way typical and differs in no feature from those obtained in the "black-boy" country of Kangaroo Island, in the ti-tree of the South-East, or in the bush of the Mount Lofty Ranges.

Dromicia nana is confined to Tasmania. In 1863 Krefft described a species which he named *D. unicolor*, from the neighbourhood of Sydney. By Oldfield Thomas this species is said to be the same as *D. nana*, and this author suggests that Krefft's animals had escaped from captivity. There are certain measurements given by Krefft which almost seem to preclude his supposition being correct; but without further facts being available it is impossible to decide the matter. It is, at any rate, certain that Krefft's specimens do not represent the new species described here, for he gives a total head and body length of $6\frac{1}{2}$ inches, which considerably exceeds the measurements of the average specimens of *D. nana*, and is almost double those of the new species. With the exception of Krefft's doubtful species, no other species of the *nana* group has been recorded from the mainland. The new species here described was captured at Millicent, in the South-East, and I am indebted to Dr. Rolland, of that town, for the type (male adult) specimen.

The whole genus *Dromicia* is very naturally divided into two sections by reference to the dentition.

In the one section, the last premolar of the lower jaw is a well-developed tooth which is as high as, or higher, than the molars; and in the other section, this tooth is a minute one, being as small as, or smaller than, the two anterior premolars. In the second section there is only one described species, *D. concinna* (Gould, 1845), which also differs from the other members of the genus in having the hairs of the ventral surface of the body pure white from base to tip.

In the first section, characterised by the well-developed last lower premolars, are two species, *D. lepida* (Thomas, 1888), and *D. caudata* (Milne-Edwards, 1877), which possess four molars, and one species, *D. nana* (Desmarest, 1817), which, like *D. concinna*, possesses only three molars above and below.

The new species described here falls into the same group as *D. nana*, for it has a well-developed last lower premolar and only three molars.

A differential table for the species may be summarised as follows:—

A. Hairs of ventral surface grey at the base. Last lower premolars well developed and as high as the molars.			
B. Molars 4/4.			
C. Size large.	Head and body <i>circ.</i> 100.	Tail long <i>circ.</i> 140 ..	<i>D. caudata</i>
CC. Size small.	Head and body <i>circ.</i> 70.	Tail <i>circ.</i> 75 ..	<i>D. lepida</i>
BB. Molars 3/3.			
D. Size large.	Head and body <i>circ.</i> 100.	Tail longer than head and body	<i>D. nana</i>
DD. Size smaller.	Head and body <i>circ.</i> 90.	Tail shorter than head and body	<i>D. britta</i>
AA. Hairs of the ventral surface white throughout. Last lower premolar minute and no larger than the two anterior premolars			
			<i>D. concinna</i>

***Dromicia britta*, n. sp.**

General colouration and appearance much as in *D. nana*, but at once distinguished from that species by its smaller size, greyer colouration, and shorter tail.

General colour greyish—almost mouse-grey—on the dorsal surface. The colouration is more sombre than that of any other member of the genus, the fawn colour of *D. nana* and the bright brown of *D. concinna* being wholly lacking. The pelage is short, soft, and dense. Individual hairs of the mid-dorsal region measure only 5-6 mm., whereas in the corresponding region of *D. nana* the hairs are double that length. Each individual hair of the dorsal surface is dark smoke-grey at the base and for almost the whole of its length, only the immediate tip being pale grey. The face is slightly lighter than the rest of the dorsal surface of the body. The region around the eye is dark, and this dark area is carried forwards slightly in advance of the anterior canthus of the eye, but does not continue as a dark whisker mark as it does in *D. nana*.

The ventral surface and the inner aspect of the limbs are pale grey, the hairs being smoky-grey at the base and pale grey at the tip. The darker grey of the dorsal surface and the paler grey of the ventral surface merge gradually into each other, there being no definite line of demarcation.

The tail is shorter than the head and body; the basal fifth is clothed with a continuation of the general body hairs, the remaining four-fifths being covered with short, closely adpressed, shining, dark hairs. Basal incrustation is only slightly developed.

The rhinarium is dusky-brown in colour, finely tessellated, and sharply delimited. It is grooved in the middle line. The facial vibrissae are well developed, the longest member of the mystacial set measuring 17 mm. All the facial vibrissae are black in their entire length: the ulnar vibrissae, of which there are two, are white. The ears are long, membranous in texture, and dusky-brown in colour. The pes is remarkably small, being actually no larger than that of *D. concinna* and considerably smaller than that of *D. nana*. The manus and pes are clothed with grey hairs, the manus being darker than the pes; details of the palm and sole as in other members of the genus.

Skull, in general, like that of *D. nana*, but smaller in all measurements. Dentition as in *D. nana*, but teeth considerably smaller. In the skull of the type specimen, which is an adult male, the upper anterior premolar is more reduced than the corresponding tooth in *D. nana* and is present as a minute rudiment only upon the right side.

Dimensions.			Dimensions of Skull.		
		Adult ♂ type			Adult ♂ type
Head and body	90	Basal length	22
Rhinarium to eye	10	Zygomatic breadth	16.8
Ear	17	Nasals length	7.3
Lower leg	21	Interorbital breadth	4.5
Pes	11	Palate length	12
Tail	80	Molar series	3.2

Table of comparative dimensions of *D. britta*, *D. nana*, and *D. concinna*.

	<i>D. britta.</i>	<i>D. nana.</i>		<i>D. concinna.</i>	
Head and body	90	100	97	80	77
Rhinarium to eye	10	11	11.3	8.8	8.5
Ear	17	17.4	17	12	12
Lower leg	21	26	27	21	20
Pes	11	14.7	16	12.2	12
Tail	80	104	111	89	82
Basal length of skull	22	23.6	23	19.6	19.5
Zygomatic breadth	16.8	16.9	17.5	14	14
Nasals length	7.3	9	10	7.5	7.5
Interorbital constriction	4.5	4.7	5	4.1	4
Palate length	12	13	13	10.5	10
Molar series	3.2	4	4	2.8	2.8

Type specimen, an adult male from Millicent forwarded by Dr. Rolland. Other specimens have since been obtained, but so far none have been available for examination.